Ministry of
Northern Development
and Mines

Ontario

ONTARIO GEOLOGICAL SURVEY

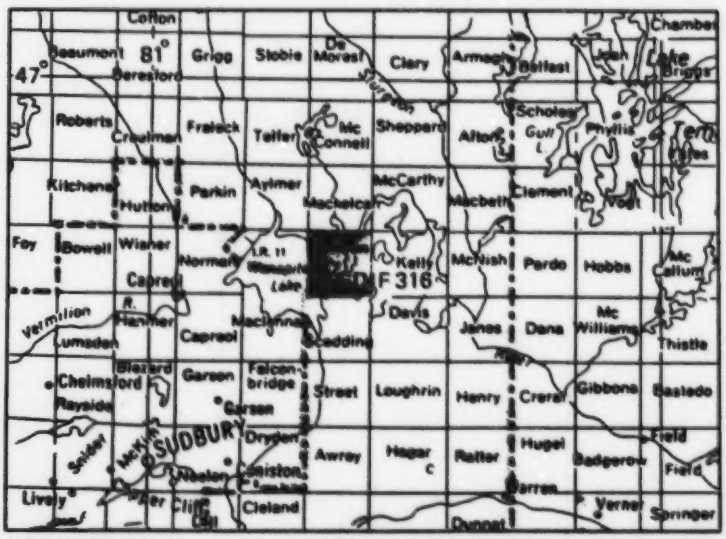
GEOLOGICAL DATA INVENTORY FOLIO

GDIF 316

RATHBUN TOWNSHIP

DISTRICT OF SUDBURY

Compiled by the staff of
the Resident Geologist's Office
Sudbury



LOCATION MAP

Scale 1:1 013 760 or 1 inch to 16 miles

87-00305/

NTS Number 41 I/10, 15

Mining Claim Map Number M 1071

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Geological Survey does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey

1986: Rathbun Township, District of Sudbury; Ontario Geological Survey, Geological Data Inventory Folio 316, compiled by the staff of the staff of the Resident Geologist's Office, Sudbury, 32p. and 2 maps.

Original Compilation by: Adlington, Richard, March 26, 1986

Date	Page Revised	Revised by

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RATHBUN TOWNSHIP

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Map Scale 1: 31 680 or 1 inch to ½ mile

CONVERSION FACTORS FOR MEASUREMENTS IN ONTARIO GEOLOGICAL SURVEY PUBLICATIONS

If the reader wishes to convert imperial units to SI (metric) units or SI units to imperial units the following multipliers should be used:

CONVERSION FROM SI TO IMPERIAL			CONVERSION FROM IMPERIAL TO SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
		LENGTH			
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709 7	chains	1 chain	**20.116 8**	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
		AREA			
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	**2.589 988**	km^2
1 ha	2.471 054	acres	1 acre	**0.404 685 6**	ha
		VOLUME			
1 cm^3	0.061 02	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	**0.028 316 85**	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	**0.764 555**	m^3
		CAPACITY			
1 L	1.759 755	pints	1 pint	**0.568 261**	L
1 L	0.879 877	quarts	1 quart	**1.136 522**	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
		MASS			
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	**28.349 523**	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 908 8**	t
		CONCENTRATION			
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	**34.285 714 2**	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	**1.714 285 7**	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy)/ton (short)	20.0	pennyweights/ton (short)
1 pennyweight/ton (short)	0.05	ounce (troy)/ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

NOTE–Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries published by The Mining Association of Canada in co-operation with the Coal Association of Canada.

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no'; if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	Yes	R.A.
2	Assessment Files Research Office, Toronto	NA	R.A.
3	ODM General Index; 9 Volumes	Yes	R.A.
4	Catalogue of Airborne Geophysical Surveys (ODM)	Yes	R.A.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	Yes	R.A.
6	ODM Industrial Mineral Reports	No	R.A.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	No	R.A.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	Yes	R.A.
9	Newspaper Clippings File	Yes	R.A.
10	GSC Index to Publications	Yes	R.A.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	R.A.
12	OGS Index Maps	Yes	R.A.
13	Source Mineral Deposit Records (O.G.S.)	Yes	R.A.
14	Author - Subject Articles File	Yes	R.A.
15	Miscellaneous Papers: ODM & OGS	Yes	R.A.
16	ODM Geological Circulars: OGS Study Series	Yes	R.A.
17	ODM Preliminary Reports: ODM Bulletins	No	R.A.
18	ODM – OGS Open File Reports	Yes	R.A.
19	OGS Northern Ontario Engineering Geology Terrain Studies	Yes	R.A.
20	OGS Aggregate Resources Inventory Papers	No	R.A.
21	OGS Mineral Potential Maps	Yes	R.A.
22	Theses on File, Sudbury	Yes	R.A.
23	Aerial Photographs on File, Sudbury	Yes	R.A.

METALS AND MINERÁLS REFERENCES LIST

- △ anh. . . . . Anhydrite
- △ ank. . . . . Ankerite
- △ anna . . . . . Annabergite
- △ ap. . . . . Apatite
- △ arg . . . . . Argentite
- △ As . . . . . Arsenic
- △ asp . . . . . Arsenopyrite
- △ asb . . . . . Asbestos
- △ ba. . . . . Barite
- △ be. . . . . Beryl
- △ Bi. . . . . Bismuth
- △ bn . . . . . Bornite
- △ bran . . . . . Brannerite
- △ bruc . . . . . Brucite
- △ Cd . . . . . Cadmium
- △ calc. . . . . Calcite
- △ carb . . . . . Carbonate
- △ cel . . . . . Celestite
- △ cc. . . . . Chalcocite
- △ cp. . . . . Chalcopyrite
- △ ch. . . . . Chert
- △ clay . . . . . Clay
- △ Co . . . . . Cobalt
- △ cob. . . . . Cobaltite
- △ cb. . . . . Columbite
- ▲ Cu . . . . . Copper
- △ cor . . . . . Corundum
- △ dol . . . . . Dolomite
- △ ep. . . . . Epidote
- △ ery . . . . . Erythrite
- △ fel . . . . . Feldspar
- △ fl . . . . . Fluorite (flurospar)
- △ fu. . . . . Fuchsite
- △ gn. . . . . Galena
- △ gt. . . . . Garnet
- △ goe . . . . . Goethite
- ▲ Au . . . . . Gold
- △ gf. . . . . Graphite
- △ gl . . . . . Gravel
- △ gyp. . . . . Gypsum
- △ hem . . . . . Hematite
- △ il . . . . . Ilmenite
- △ Fe . . . . . Iron
- △ IF. . . . . Iron Formation
- △ jas . . . . . Jasper
- △ kaol . . . . . Kaolinite (kaolin)
- △ ky . . . . . Kyanite
- △ Pb . . . . . Lead
- △ lim . . . . . Limonite
- △ Li. . . . . Lithium
- △ mgst . . . . . Magnesite
- ▲ mag . . . . . Magnetite
- △ mc . . . . . Malachite
- △ Mn . . . . . Manganese
- △ mb . . . . . Marble
- △ mar. . . . . Marcasite
- △ ma . . . . . Marl
- △ mi . . . . . Mica
- △ ml . . . . . Millerite
- △ mo . . . . . Molybdenite
- △ Mo . . . . . Molybdenum
- △ mon . . . . . Monazite
- △ ne. . . . . Nephelite (nepheline)
- △ nc. . . . . Niccolite
- ▲ Ni. . . . . Nickel
- △ Nb . . . . . Niobium
- ▲ Pd . . . . . Palladium
- △ peat . . . . . Peat
- △ pent . . . . . Pentlandite
- ▲ Pt. . . . . Platinum
- △ py . . . . . Pyrite
- △ pyl . . . . . Pyrochlore
- △ pyrl . . . . . Pyrolusite
- △ po . . . . . Pyrrhotite
- △ q . . . . . Quartz
- △ qcv . . . . . Quartz carbonate vein
- △ ra. . . . . Radioactive minerals
- △ RE . . . . . Rare Earths
- △ sd. . . . . Sand
- △ sgl . . . . . Sand and gravel
- △ ss . . . . . Sandstone
- △ scap . . . . . Scapolite
- △ shee . . . . . Scheelite
- △ serp . . . . . Serpentine
- △ sh. . . . . Shale
- △ sid . . . . . Siderite
- △ si . . . . . Silica
- ▲ Ag . . . . . Silver
- △ sl . . . . . Slate
- △ sm . . . . . Smaltite
- △ sod. . . . . Sodalite
- △ spec . . . . . Specularite
- △ sp. . . . . Sphalerite
- △ spd. . . . . Spodumene
- △ staur . . . . . Staurolite
- △ stib. . . . . Stibnite
- △ st . . . . . Stone
- △ talc. . . . . Talc
- △ Te . . . . . Tellurium
- △ td. . . . . Tetrahedrite
- △ th. . . . . Thorite
- △ Th . . . . . Thorium
- △ thuc . . . . . Thucholite
- △ ti . . . . . Titanite
- △ Ti. . . . . Titanium
- △ tour . . . . . Tourmaline
- △ trap . . . . . Trap rock
- △ W. . . . . Tungsten
- △ uran . . . . . Uraninite
- △ U . . . . . Uranium
- △ verm . . . . . Vermiculite
- △ Y . . . . . Yttrium
- △ Zn . . . . . Zinc
- △ zr . . . . . Zircon

Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

RATHBUN TOWNSHIP

MINERAL OCCURRENCES

Map Ref. Letter	Name(s)	Mineralization	Source Mineral Deposit Record	References in OGS Mineral Deposits Circulars & OGS Industrial Mineral Reports	Additional References and/or Remarks
A	Burton prospect (Rathbun Lake occurrence)	Cu, Ni, Pt, Pd, Au, Ag	Cu 4	MRC 12, p. 260	OGS Report 213, pp. 97 - 101
B	Comstock Mine	Au	Au 2	MDC 18, p. 80	See ODM General Index Search
C	Crystal Mine	Au	Au 2	MDC 18, pp. 80, 81	See ODM General Index Search Rathbun Tp. Assessment File 0030 Rathbun Tp. Assessment File 0021-B1
D	Dobson occurrence	Au	---	MDC 18, p. 115	Report Roy. Comm. Mineral Resources of Ont., 1890, p. 112
E	Gordon Mine	Au	Au 2	---	See ODM General Index Search Rathbun Tp. Assessment File 0021-B1
F	Hub Mine	Au	---	---	ODM AR 7, pt. 2, pp. 140, 141
G	Hubbel Mine	Au	---	---	ODM AR 7, pt. 1, p. 87
H	Wanapitei Lake occurrence (Rathbun Tp. Iron occurrence)	mag	---	MRC 11, p. 357	O.G.S. Map P.1609, No. 9 Report of Iron Ore Committee, 1923, p. 207
I	Last Chance Mine (O'Connor Mine)	Au	Au 4	MDC 18, p. 115	ODM AR 6, p. 269 ODM AR 7, pp. 87, 140 Rathbun Tp. Assessment File 0030
J	McVittie, W. (?)	Au	---	---	Engineering & Mining Jr., Nov. 3, 1900, p. 531

GDIF FORM NO. 1

MINERAL OCCURRENCES

Map Ref. Letter	Name(s)	Mineralization	Source Mineral Deposit Record	References in OGS Mineral Deposits Circulars & OGS Industrial Mineral Reports	Additional References and/or Remarks
K	Mondoux occurrence	Au	Au 3	MDC 18, p. 115	ODM AR 5, p. 263 O.G.S. Map 2451, No. 29 Rathbun Tp. Assessment File 0023

RATHBUN TOWNSHIP

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE SUDBURY COMPANY/AUTHOR (file number)		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	SHAFT WORK	PRODUCTION	
1	Burco Exploration Ltd. (Burton, M.)				71															
2	Burton, C. S. (Burton prospect, Burco Explorations Ltd., Norlex Mines Ltd., Waco Petroleums Ltd., Dolmac Mines Ltd.)				66 68 71		00's											00's		
3	Canadian Nickel Co. Ltd.	82				82			81	81	81									
4	Canadian Occidental Petroleum Ltd. (Dejour Mines Ltd.)								81	81										
5	Comstock Gold Mining & Development Co. of Ontario, Ltd.			1896		1896	1897											1896 1897		
6	Consolidated Professor Mines Ltd. (Canadian Occidental Petroleum Ltd.)								81	81										
7	Crystal-Comstock Gold Mines Ltd. (Crystal & Comstock mines)				25		36											25 26		

GDIF FORM NO. 7

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE SUDBURY COMPANY/AUTHOR (file number)		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	SHAFT WORK	PRODUCTION	
8	Crystal Gold Mining Co. of Rathbun, Ltd. (Crystal Gold Mining & Milling Co. of Wahnapitae, Ltd., Crystal-Comstock Gold Mines Ltd., Little AG Mines Ltd., Crystal Mine)				25 63 70		1895 1896 1897 07 08					63[1] 70	63[1] 70					1895[2] 1896 1897	1897 1898 1908[3]	
9	Dennie, R. C.				64															
10	Dolmac Mines Ltd. (Burton occurrence)	57			55 56 58	55 57		55 56 59				54	54					54[4]		
11	Flag Oils Ltd. (Flag Resources Ltd., Flag Resources (1985) Ltd., Jerome, A. E. Jr., Jerome, E., Golden Briar Mines Ltd.)				85 86	85			81 85	81 85										
12	Floron Mining Enterprises Ltd. (Burton occurrence)			81																
13	Gordon Mine (Sylvanite Gold Mines Ltd.)			1895	1895													1895		

GDIF FORM NO. 2

RATHBUN TOWNSHIP

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE SUDBURY COMPANY/AUTHOR (file number)		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	SHAFT WORK	PRODUCTION	
14	Hub Mine																	-1897		
15	Hubbel Mine			1897														1897[5]		
16	Bronco Mining & Smelting Co. Ltd. (Wanapitei Lake Occurrence, Rathbun Tp. Iron Occurrence)	62		08	08-09							62								
17	Kennco Explorations (Canada) Ltd. (Rivers, E. J., Tomrose Mines Ltd.)								68	68										
18	Last Chance Mine (O'Connor Mine, Ranger, H., LaRose, J., O'Connor, D.)			1896 1897														1896[6]		
*19	McVittie, W.			00																
20	Mareast Explorations Ltd. (Mid North Engineering Ltd., Dennis, W. W.)				68							67 70	67							
21	Midnorth Engineering Ltd.				56 58															

GDIF FORM NO. 2

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE SUDBURY COMPANY/AUTHOR (file number)		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	SHAFT WORK	PRODUCTION	
22	Mondoux occurrence			1893 1894																
23	New Augarita Porcupine Mines Ltd. (Mackie, W. & J.)	83			84	84						83	83		83					
24	Paramaque Mines Ltd.											66	66							
25	Sylvanite Gold Mines, Ltd. (Crystal & Gordon Mines)	44			43	44	43[7]											43		
26	Vanda Gold Mines Ltd. (Last Chance Mine)				49															
27	Viitala, R. L. (Gordon Mine, Mondoux occurrence)	82 83	81	82	84	82						83	80 81 83							
28	Waco Petroleums Ltd. (Marshall, F., Burton occurrence)				63	63						63	63							
	[1]No data																			

GDII FORM NO. 2

RATHBUN TOWNSHIP

TYPE OF WORK	Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE SUDBURY COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	SHAFT WORK	PRODUCTION	
[2]Total of 5 shafts and 2 adits reported [3]Total production 730 tons, 387 oz. Au [4]Shaft dewatered [5]2 shafts, 15' and 25' [6]Shaft or pit, 18' deep *Property location uncertain [7]Bulk sampling, 110' level and No. 4 shaft																			

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth Degrees	Initial Dip of Hole Degrees	Thickness of Overburden Feet	Total Length of Hole Feet	Mineralization Noted in Log	Assay Data Included for
1	Burco Explorations	L2	1968	S60W	45	11	102	Log in Burton, C. S. file	
1a		L3	1971	S75E	35	5	121	--	--
2		D1	1971	S	40	0	508	--	--
3		D2	1971	S20W	40	0	206	--	--
4		S1	1971	N	55	5	204	cp	--
5	Burton, C. S.	1	1966	S5W	45	12	801	cp, py	--
6		3	1966	S10W	30	12	187	--	--
7		2	1966	N10E	45	20	298	cp	--
7a		4	1966	S88E	45	23	625	cp	--
8		L1	1968	--	90	5	727	--	--
9		S2	1971	SE	40	0	146	--	--
10	Crystal-Comstock Gold Mines	?	1925	Several	holes.	No data.			
11	Little AG Mine	?	1963	Several	holes.	No data.			
11a		?	1970	Several	holes.	No data.			
12	Dennie, R. C.	2	1964	--	90	0	154	--	--
13	Dolmac Mines	1	1955	144	35	0	135	--	--
13a		2	1955	139	35	0	145	--	--
14		3	1955	297	45	1	90	cp, po	--
14a		6	1956	S70E	45	13	183	py	--
14b		8	1956	N70W	45	6	184	--	--
14c		9	1956	N70W	45	14	163	py	--
14d		1-58	1958	025	45	12	40	py, po, cp	--
14e		2-58	1958	025	58	7	52.5	cp, po, py	--
14f		3-58	1958	025	27	14	27	cp	--
14g		4-58	1958	025	46	7.5	60.5	po, py	--
14h		5-58	1958	025	56	6.5	60.5	po, cp	--
14i		6-58	1958	127	48	0	49	cp, po	--
14j		7-58	1958	205	21	11.5	47	po, cp, py	--
14k		8-58	1958	205	51	3	57	py, po, cp	--
14l		9-58	1958	205	43	4	55	po, cp	--
14m		10-58	1958	205	68	3	61	cp, po, py	--
14n		11-58	1958	--	90	2	51	py, cp, po	--
14o		12-58	1958	205	45	3	58	py	--

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth Degrees	Initial Dip of Hole Degrees	Thickness of Overburden Feet	Total Length of Hole Feet	Mineralization Noted in Log	Assay Data Included for
15	Dolmac Mines	4	1956	N70W	45	14	270	--	--
15a		5	1956	S70E	45	6	373	--	--
16		7	1956	N70W	45	6	161	--	--
17		11	1956	S70E	45	6	163	--	--
17a		10	1956	N70W	45	10	149	--	--
18	Flag Resources (1985)	ML-85-2	1985	265	60	4	494	py	--
18a		ML-85-1	1985	180	No log.				
19		CN-85-1	1985	030	45	7	232	cp, asp	Au
19a		CN-85-2	1985	030	45	10.3	195.5	py	Au
19b		CN-85-5	1985	055	45	19	465	py	Au
20		CN-85-3	1985	055	45	7	155	py	Au
20a		CN-85-4	1985	055	45	7	177	py	Au
21	Gordon Mine	?	1895	?	70	No data.			
22		?	1895	No data.					
23	Ironco Iron & Smelting	?	1908-09	W	45	No data.			
24		?	1908-09	S36W	45	No data.			
25	Mareast Explorations	?	1968	No data.					
25a		?	1968	No data.					
26	Midnorth Engineering	1	1956	S65E	50	1	87	po, py	--
26a		1	1958	S35E	45	5	222	--	--
26b		2	1958	--	90	4	21.5	--	--
27	New Augarita Porcupine Mines	2	1984	--	90	6	224	py	Au
28		84-1	1984	N60W	65	2	331	py	Au
28a		84-3	1984	260	45	7	690	py, po	Au
28b		84-4	1984	255	47	7	324	py	Au
28c		84-5	1984	255	60	9	385	py, po	Au
28d		84-6	1984	240	45	12	299	py, po	Au
28e		84-7	1984	240	60	7	350	py	Au
28f		84-8	1984	260	45	14	285	py	Au
28g		84-9	1984	260	45	28	281.4	py	Au
28h		84-10	1984	260	45	28	309	py	Au
28i		84-11	1984	S	45	10	234	py	Au
28j		84-13	1984	250	44	19	154	--	Au

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth Degrees	Initial Dip of Hole Degrees	Thickness of Overburden Feet	Total Length of Hole Feet	Mineralization Noted in Log	Assay Data Included for
28k	New Augarita Porcupine Mines	?	?	S73W	No data.				
281		?	?	S73W	No data.				
29		84-12	1984	010	45	10	171	py	Au
30	Sylvanite Gold Mines	?	1943	N14E	45	?	147	No log.	
30a		?	1943	N20E	60	?	1100	No log.	
31	Vanda Gold Mines	1	1949	S62W	50	10	200	"Heavy"	--
31a		2	1949	N80W	60	10	300	--	--
31b		3	1949	S70W	40	10	425	--	--
32	Viitala, R. L.	RV-1	1984	--	90	0	135	py, cp, Au, mar	
32a		RV-2	1984	--	90	0	130.5	py, Au, po, cp	--
32b		RV-4	1984	N	45	0	137	cp, py, bn, Au	
33	Waco Petroleums	1	1963	S42.5W	45	34	170	cp	--
33a		2	1963	S42.5W	60	28	476	py	--
34		3	1963	--	90	0	75	cp, po, py	Ni, Cu, Ag, Au, P.M.
34a		4	1963	N10.5W	45	9	75	--	--
34b		5	1963	N63W	55	0	154	cp, po	Ni, Cu, Ag, Au, P.M.
34c		6	1963	N64W	55	6	150	cp	Ni, Cu, Ag, Au, P.M.

GDIF FORM NO. 3

RATHBUN TOWNSHIP

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden	Total Length of Hole	Mineralization Noted in Log	Assay Data Included for

GDIF FORM NO. 3

AIRBORNE GEOPHYSICAL SURVEY DATA

No.	By For	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing
3	Canadian Nickel Co. Canadian Nickel Co.	Magnetic Electromagnetic Radiometric	120 m	E - W	200 m
4	Kenting Earth Sciences Ltd. Canadian Occidental Petroleum Consolidated Professor Mines	Magnetic Electromagnetic (VLF)	150' - 200'	N - S & E - W	1320'
11	Terraquest Ltd. Flag Resources Ltd.	Magnetic Electromagnetic (VLF)	100 m	N - S	200 m
11	Kenting Earth Sciences Ltd. Flag Oils Ltd.	Magnetic Electromagnetic (VLF)	150' - 200'	N - S	½ mile
17	Questor Surveys Ltd. Kennco Explorations (Canada)	Magnetic Electromagnetic	400' ("Bird" at 150')	N24°E S24°W	1000' - 1200'

GDIF FORM NO. 4

GEOCHEMICAL SURVEY DATA

Map Sample Site Reference Number	Type of Survey	Analysis For	By	Reference
1	Gold in pine needles, atomic absorption	Au	Viitala, R. L.	Rathbun Tp. Assessment File 0016-C1

GDIF FORM NO. 5

MISCELLANEOUS DATA

AGE DATING

Site	Method	Material	Reference	Result

NEWSPAPER CLIPPINGS FILE

NOTE: A file of newspaper clippings about the companies listed below, who have worked in this area, is maintained in the Regional/Resident Geologist's Office. SUDBURY

NORLEX MINES LTD.

N. Miner	Dec. 8/65
	Dec. 9/65
	Feb. 10/66
	Feb. 24/66
	Feb. 6/67

FLAG OILS LTD., FLAG RESOURCES LTD.

(GOLDEN BRIAR MINES, HECLA MINING CO. OF CANADA)

N. Miner	Dec. 18/80
Northern Life	Mar. 4/81
N. Miner	Mar. 5/81
Sudbury Star	Mar. 12/81
N. Miner	Mar. 26/81
	May 7/81
	June 11/81
	June 25/81
	July 9/81
	Oct. 22/81
	Nov. 25/82
	Jan. 20/83
	Mar. 3/83
Sudbury Star	Mar. 17/83
George Cross Newsletter	Mar. 3/83
	Mar. 15/83
N. Miner	Mar. 10/83
	Mar. 17/83
	Mar. 24/83
	Apr. 14/83
	June 30/83
	July 7/83
Sudbury Star	Aug. 6/83
N. Miner	Aug. 11/83
	Sept. 1/83
	Oct. 6/83
	Oct. 27/83
	Nov. 10/83
	Dec. 15/83
	Dec. 22/83
	Jan. 12/84
	Apr. 26/84
	May 24/84
	July 12/84
	Sept. 16/84
	Oct. 11/84
Can. Min. Journal	Dec./84

NEWSPAPER CLIPPINGS FILE

NOTE: A file of newspaper clippings about the companies listed below, who have worked in this area, is maintained in the Regional/Resident Geologist's Office. SUDBURY

Northern Life	Jan. 9/85
Flag Resources Information Circular	Jan. 14/85
George Cross News Letter	Feb. 13/85
N. Miner	Feb. 28/85
George Cross News Letter	Mar. 8/85 Mar. 21/85
N. Miner	Apr. 4/85
George Cross News Letter	Sept. 4/85
N. Miner	Sept. 16/85
Globe & Mail	Oct. 7/85
N. Miner	Jan. 13/86 Mar. 24/86

CRYSTAL GOLD MINING CO.

Sudbury Star (quoting item from)	Jan. 21/84 Dec. 17, 1896

NEW AUGARITA PORCUPINE MINES

N. Miner	Jan. 19/84

McVITTIE, W.

Eng. & Mining Jr.	Nov. 3, 1900, p. 531

ODM GENERAL INDEX SEARCH

Words searched:

BURCO EXPLORATIONS
BURTON, C. S.
BURTON, M.
BURTON PROSPECT
CANADIAN NICKEL CO.
CANDIAN OCCIDENTAL PETROLEUM
COMSTOCK GOLD MINING & DEVELOPMENT CO. OF ONTARIO
COMSTOCK PROSPECT
CONSOLIDATED PROFESSOR MINES
CRYSTAL-COMSTOCK GOLD MINES

Index Volume	Listing:	Report Volume	Part	Page
9	BURCO EXPL. LTD.			
	Rathbun Tp., Sudbury Dist.	MP 75		108
9	BURTON, M.			
	Wanapitei L. area, Sudbury Dist.	MP 82		112
8	BURTON PROSPECT			
	Rathbun Tp., Sudbury Dist.			
	mining property, report on	MRC 12		260,261
1	COMSTOCK GOLD MINE			
	near Boland (Wanapitei) lake	7	2	139
	Capital and date of charter	7		8, 85
	Notes	6		269
		7		85
9	COMSTOCK PROSPECT			
	Rathbun Tp., Sudbury Dist.			
	report on property	MDC 18		80
2	CRYSTAL-COMSTOCK GOLD MINES, LTD.			
	Capital and date of charter	34	1	59
1	CRYSTAL GOLD MINE, Boland (Wanapitei) lake			
	Diabase near	7		149
	Granite in	7		141
	notes	7		149,150
	Photos	7		124,125
	Reopened (1907)	17		58
	Work at (1895)	5		262
	(1896)	6		57,267-269
	(1897)	7		86, 87, 138,139
2	CRYSTAL GOLD MINE, Rathbun tp.			
	Age of deposit	27	1	203
	Description	30	2	17
	Keweenawan intrusives	30	2	7
	Location, map showing. Facing	30	2	18
	Producing	30	2	4
3	CRYSTAL GOLD MINE, Rathbun tp.			
	History; mineralization	41	4	46
	Production	49	1	17

ODM GENERAL INDEX SEARCH

Words searched:

CRYSTAL MINE
CRYSTAL GOLD MINING CO. OF RATHBUN
CRYSTAL GOLD MINING & MILLING CO. OF WAHNAPITAE
DEJOUR MINES
DENNIE, R. C.
DENNIS, W. W.
DOBSON OCCURRENCE
DOLMAC MINES
FLAG OILS
FLAG RESOURCES
FLAG RESOURCES (1985)
FLORON MINING ENTERPRISES
GOLD
GOLDEN BRIAR MINES
GORDON MINE
HECLA MINING CO. OF CANADA
HUB MINE
HUBBEL MINE

Index Volume	Listing:	Report Volume	Part	Page
4	CRYSTAL GOLD MINE, Rathbun tp.			
	Production statistics. Table 4	59	1	
5	CRYSTAL GOLD MINE, Rathbun tp.			
	Production statistics	64	1	18
9	CRYSTAL MINE			
	Rathbun Tp., Sudbury Dist.			
	report on property	MDC 18		80, 81
1	CRYSTAL GOLD MINING CO.			
	Assays made for	5		214
	Capital of	7		8
	and officers	5		262
	Work by, See Crystal gold m.			
1	CRYSTAL GOLD MINING AND MILLING CO. (OF WAHNAPITAE)			
	Capital and date of charter	18	1	44
	Producing	18	1	9
7	DOLMAC MINES LTD.			
	Mining property, Rathbun twp.			
	report on (1954)	MRC 1		48
	(1957)	MRC 2		87
9	GOLD			
	Rathbun Tp., Sudbury Dist.	MP 75		108,109
1	GORDON GOLD MINE, Rathbun tp.			
	Work at (1895)	5		262
1	HUB MINE, Rathbun tp.			
	Note	7		140
1	HUBBEL MINE, Rathbun tp.			
	Note	7		87
9	IRONCO MINING & SMELTING CO. LTD.			
	Rathbun Tp., Sudbury Dist.	MP 75		107
1	LaROSE, JOSEPH			
	Discoverer of Last Chance Silver Mine	6		269

ODM GENERAL INDEX SEARCH

Words searched:

IRONCO MINING & SMELTING CO.
JEROME, E.
JEROME, JR., A. E.
KENNCO EXPLORATIONS (CANADA)
LaROSE, J.
LAST CHANCE OCCURRENCE
LITTLE AG MINES
MACGREGOR, R.
MCVITTIE, W.
MATAGAMASI LAKE
MATTAGAMASHING LAKE
MAREAST EXPLORATIONS
MARSHALL, F.
MID-NORTH ENGINEERING
MONDOUX OCCURRENCE
NEW AUGARITA
NORLEX MINES
O'CONNOR, D.
PARAMAQUE MINES
RANGER, H.
RATHBUN TP.

Index Volume	Listing:	Report Volume	Part	Page
1	LAST CHANCE GOLD MINE			
	Mattagamashing (Matagamasi) lake			
	Notes (1896)	6		269
	(1897)	7		87, 140
1	McVITTIE, WILLIAM			
	Prospecting			
	Wanapitei lake	N.O.*		112
1	MATAGAMASI LAKE, E. of			
	Wanapitei l.	N.O.		83
	Gold mining on and near	7		140,141
	stamp mill	7		87
	See also Crystal gold m.			
	Last Chance gold m.			
	Photo	7		124,125
	Rocks on and near:			
	argillites	1		73
	conglomerates	10		203
	quartzites	1		72
	roofing slate	1		93
	Route to, from Sturgeon river	N.O.		84
	scenery and game	N.O.		102
1	MATTAGAMASHING LAKE			
	E. of Wanapitei l.			
	See Matagamasi l.			
1	MONDOUX GOLD MINE, Rathbun tp.			
	work at (1894)	5		263
9	MONDOUX OCCURRENCE			
	Rathbun Tp., Sudbury Dist.			
	report on property	MDC 18		115
9	NORLEX MINES LTD.			
	Rathbun Tp., Sudbury Dist.	MP 75		108
1	O'CONNOR, DANIEL			
	Part owner, Comstock gold m.	6		270
	Last Chance gold m.	6		269

* Report of the survey and exploration of Northern Ontario, 1900

GDIF FORM NO. 8

ODM GENERAL INDEX SEARCH

Words searched:
RIVERS, E. J.
SYLVANITE GOLD MINES
TAGLIAMONTE, F. P.
TOMROSE MINES
VANDA GOLD MINES
VIITALA, R. L.
WACO PETROLEUMS

Index Volume	Listing:	Report Volume	Part	Page
8	PARAMAQUE MINES LTD.			
	Sudbury Area, Sudbury Dist.	MP 24		29
9	PARAMAQUE MINES LTD.			
	Rathbun Tp., Sudbury Dist.	MP 75		108
1	RANGER, HENRY			
	Discoveries:			
	Jaspillite near L. Wanapitei	10		177
	Last Chance gold mine	6		269
1	RATHBUN TP., Sud.			
	Gold mining	5		262,263
		7		57, 84-86
	See also Comstock mine			
	Crystal mine			
	Mattagamashing lake			
	Iron ores, notes by Culbert	13	1	224
2	RATHBUN TP., Sud.			
	Iron formation, described,	I.O.*		207
3	RATHBUN TP., Sud.			
	Gold mg. See Crystal g. m.			
4	RATHBUN TP., Sud.			
	Gold mg. See Crystal g. m.			
5	RATHBUN TP., Sud.			
	Gold mining. See Crystal g. m.			
8	RATHBUN TP., SUDBURY DIST.			
	copper/nickel	MRC 12		260,261
	iron	MRC 11		357
9	RATHBUN TP., SUDBURY DIST.			
	see also Rathbun & Aylmer Tps., Sudbury Dist.			
	chalcopyrite	MP 70		105
	gold	MDC 18		80, 81, 115

* Report of the iron ore committee

ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:	Report Volume	Part	Page
9	RATHBUN & AYLMER TPS., SUDBURY DIST. Summary of field work, 1977 by B. Dressler	MP 75		107-109
4	VANDA MINES, LTD. Incorporated	54	1	48
9	WACO PETROLEUMS LTD. Rathbun Tp., Sudbury Dist.	MP 75		108

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		REGIONAL GEOLOGICAL COMPILATION MAPS		
Card, K. D.	1970	Sudbury Mining Area	O.D.M. Map 2170	1" = 1 mi.
Card, K. D., Lumbers, S. B.	1974-75	Sudbury Cobalt Geological Compilation (revised)	O.G.S. Map 2361	1" = 4 mi.
Dressler, B. O.	1984	Sudbury Geological Compilation	O.G.S. Map 2491	1:50,000
	1983	Sudbury Mining Area East Part	O.G.S. Map 2603	1:50,000
Lumbers, S. B.	1973	River Valley Area, Districts of Nipissing and Sudbury	O.D.M. Map P.844	1" = 1 mi.
Meyn, H. D.	1966	Capreol Sheet	O.G.S. Map P.367	1" = 2 mi.
		GEOPHYSICAL MAPS		
Gupta, V. K.	1981	Bouguer Gravity and Generalized Geology Map, Sudbury-Onaping Lake	O.G.S. Map P.2482	1:100,000
O.D.M.-G.S.C.	1965	Aeromagnetic Map - Sudbury Sheet	7067G	1" = 4 mi.
Dept. of E.M.R.	1975	Aeromagnetic Map - Capreol Sheet, 41 I/10	1511G	1" = 1 mi.
	1975	Aeromagnetic Map - Milnet Sheet, 41 I/15	1512G	1" = 1 mi.
G. O. H. Consultants	?	Aeromagnetic Map - Sudbury Research Project Map 2	Map 2	1" = ½ mi.
O.D.M. -G.S.C.	1976	Uranium Reconnaissance Programs Airborne Gamma Ray Spectrometer Survey Sudbury	O.G.S. Map 1610	1:100,000
		SURFICIAL PLEISTOCENE TERRAIN ENGINEERING		
Burwasser, G. L.	1979	Quaternary Geology of the Sudbury Basin Area	O.G.S. Report 181 Map 2397	1:50,000
Dept. of E.M.R.	1975	Topographic Map - Capreol Sheet, 41 I/10		1:50,000
	1975	Topographic Map - Milnet Sheet, 41 I/15		1:50,000

GDIF FORM NO. 9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Gartner, J. F.	1980	N.O.E.G.T.S. Data Base Map Capreol N.O.E.G.T. Study 95 Capreol	Map 5001	1:100,000
		MINERAL POTENTIAL MAPS		
Springer, J.	1982	Mineral Potential Map of Ontario East Central Sheet	O.G.S.-OFR 5327 Map 2393	1" = 16 mi.
	1977	Ontario Mineral Potential Northern Part of Sudbury Sheet and Part of North Bay Sheet	O.G.S. Map 1512	1:250,000
		GEOCHEMICAL		
Fortescue, J. A. C.	1985	Preliminary Studies in Lake Sediment Geochemistry in an Area Northeast of Sudbury	O.G.S. Map 80 756	1:100,000 1:200,000
		GEOLOGICAL REPORTS AND MAPS		
Adlington, R.	1981	Rathbun Township, Sudbury Data Series	O.G.S. Map P.2197	1" = ½ mi.
Buchan, K. L. & Card, K. D.	1985	Preliminary Comparison of the Petrographic and Paleomagnetic Characteristics of Nipissing Diabase Intrusions in Northeastern Ontario	G.S.C. Current Research, Pt. A, Paper 1A	pp. 131-140
Card, K. D.	1978	Metamorphism of the Middle Precambrian (Aphebian) Rocks of the Eastern Southern Province	G.S.C. 78-10	pp. 269-282
Card, K. D., Innes, D. G., and Debicki, R. L.	1977	Stratigraphy Sedimentology & Petrology of the Huronian Supergroup in the Sudbury-Espanola Area	O.G.S. Study 16	
Charlton, J. et al	1890	On the Mineral Resources of Ontario. Report of the Royal Commission	Rathbun Tp.	p. 112
Coleman, A. P.	1912	Geological Map of Sudbury Nickel Region	Canada Dept. Mines Mines Branch	1" = 1 mi.

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Collins, W. H.	1936	Sudbury Series	G.S.A. Bull., Vol. 47	pp. 1675 - 1690
Dep't of Mines, Ont.	1923	Report of the Iron Ore Committee	Rathbun Tp.	p. 207
Dressler, B. O.	1978	Rathbun Township	O.G.S. Map P.1609	1" = ¼ mi.
	1979	Southern Lake Wanapitei Area, District of Sudbury	O.G.S. Map P.2228	1" = ¼ mi.
	1981	Otter Lake	O.G.S. Map 2450	1" = ¼ mi.
	1982	Geology of Wanapitei Lake Area	O.G.S. GR213	
	1982	Massey Bay	O.G.S. Map 2451	1" = ¼ mi.
	1983	Sudbury Mining Area, Western Part, Sudbury District	O.G.S. Map P.2602	1:50,000
Ferguson, S. A., Freeman, E. B.	1978	Ontario Occurrences of Float, Placer Gold & Other Heavy Minerals	O.G.S. MDC 17	
Frarey, M. J., Roscoe, S. M.	1970	The Huronian Supergroup North of Lake Huron; in Symposium on Basins and Geosynclines of the Canadian Shield, Edited by Baer, A. J.	G.S.C. Paper 70-40	pp. 143-157
Geoscience Data Centre	1984	Ontario Mineral Deposit Inventory	OFR 5470	
Gordon, J. B., et al	1979	Gold Deposits of Ontario, Part 2	O.G.S. MDC 18	pp. 80, 115
Kindle, E. D.	1936	Gold Occurrences of Ontario East of Lake Superior	G.S.C. Mem. 192	p. 143
Kindle, L. F.	1932	Moose Mountain-Wanapitei Area	O.D.M. AR 41, pt.4	p. 46
O.G.S. & Mineral Resources Branch	1982	Mineral Potential Map of Ontario East Central Sheet	OFR 5328	
		Magnetic Compilation Map		1" = 16 mi.
		Geological Compilation Map		1" = 16 mi.
			Map 2198	1" = 16 mi.
Quirke, T. T.	1922	Wanapitei Lake Map Area	G.S.C. Summary Report, 1921, pt.D	

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Robertson, J. A.	1981	The Uranium Deposits of Ontario--Their Distribution and Classification	O.G.S. MP 86	
	1982	Uranium and Thorium Deposits of Ontario, East Central Sheet	O.G.S. Map P.2426	1" = 16 mi.
Roscoe, S. M.	1969	Huronian Rocks and Uraniferous Conglomerates	G.S.C. Paper 68-40	
Satterly, J.	1977	A Catalogue of the Ontario Localities Represented by the Mineral Collection of the Royal Ontario Museum	O.G.S. MP 70	
Shklanka, R.	1968	Iron Deposits of Ontario	MRC 11	p. 357
	1969	Copper, Nickel, Lead and Zinc Deposits of Ontario	MRC 12	pp. 260, 261
Thomson, J. E.	1960	Uranium and Thorium Deposits at the Base of the Huronian System in the District of Sudbury	O.D.M. GR 1	
Vos, M. A., et al	1983	Industrial Minerals of Northern Ontario, Parts 1 & 2	OFR 5386	
Vos, M. A., Smith, B. A., Stevenato, R. J.	1981	Industrial Minerals of the Sudbury Area	OFR 5329	
Vos, M. A., Smith V.	1983	Industrial Minerals of Northern Ontario, Supplement 2	OFR 5439	
Wright, J. F.	1958	Sudbury, Ontario	G.S.C. Map 1063A	1" = 8 mi.
Yundt, S. E., et al	1983	Industrial Minerals of Ontario	O.G.S Map P.2591	1:50,000
		JOURNAL ARTICLES, THESES, TECHNICAL REPORTS		
Boissonneau, A. N.	1968	Glacial History of Northeastern Ontario II: The Timiskaming-Algoma Area	Can. Jr. Earth Sci, Vol. 5, No. 1	pp. 97-109
Brooks, E. R., Broucoum, S. J., Dalziel, I.W.D.	1976	(Discussion)(Reply) The Sudbury Basin, the Southern Province, the Grenville Front, and the Penokean Orogeny	G.S.A. Bull., Vol. 87	pp. 954-958

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Fairbairn, H. W., Robson, G. M.	1942	Breccia at Sudbury, Ontario	Jr. Geol., Vol. 50	pp. 1-33
Finn, G. C.	1981	Petrogenesis of the Wanapitei Gabbro-Norite Intrusion A Nipissing-type Diabase from Northeastern Ontario, M.Sc., UWO	Sudbury Theses File	
Gates, T. M., Hurley, P.M.	1973	Evaluation of Rb-Sr Dating Method Applied to the Matachewan, Abitibi, Mackenzie and Sudbury Dike Swarms in Canada	Can. Jr. Earth Sci., Vol. 10	pp. 900-919
Gibbins, W. A., McNutt, R. H.	1975	Rubidium-Strontium Mineral Ages and Polymetamorphism at Sudbury, Ontario	Can. Jr. Earth Sci., Vol. 12	pp. 1990-2003
Goode, A. J. J., Taylor, R. T.	1980	Intrusive and Pneumatolytic Breccias in South-west England	Rep. Inst. Geol. Sci., No. 80/2	23 pp.
Guy-Bray, J. V.	1972	New Developments in Sudbury Geology	G.A.C. Special Paper No. 10	
Hedley, D. G.	1968	The Sedimentology of the Huronian Formation, Ontario and Quebec, Canada, Ph.D., J.H.U.	Sudbury File	
Lindsey, D. A.	1969	Glacial Sedimentology of the Precambrian Gowganda Formation, Ontario, Canada	G.S.A. Bull., Vol. 80, No. 9	pp. 1685 - 1701
Long, D. G. F.	1978	Depositional Environments of a Thick Proterozoic Sandstone: the (Huronian) Mississagi Formation of Ontario, Canada	Can. Jr. Earth Sci., Vol. 15	pp. 190-206
McLennan, S. M. et al	1979	Rare Earth Elements in Huronian (Lower Proterozoic) Sedimentary Rocks: Composition and Evaluation of the Post-Kenoran Upper Crust	Geochim. et Cosmochim. Acta, Vol. 43	pp. 375-388
	1979	The Geochemistry of the Carbonate-Rich Espanola Formation (Huronian) With Emphasis on Rare Earth Elements	Can. Jr. Earth Sci., Vol. 16	pp. 230-239

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Morris, W. A.	1981	Fault Block Rotations in the Southern Province as Defined by Paleomagnetism of the Nipissing Diabase	Can. Jr. Earth Sci., Vol. 18, No. 11	pp. 1755 - 1757
Mossman, D. J.	1983	Origin and Distribution of Gold in the Huronian Supergroup, Canada--The Case for Witwatersrand-Type Paleoplacers	Precamb. Res. Vol. 20, No. 2-4	pp. 543-583
Mossman, D. J., Harron G. A.	1984	Witwatersrand - Type Paleoplacer Gold in the Huronian Supergroup of Ontario, Canada	Geosci. Can., Vol. 11, No. 1	
Palonen, P. A.	1971	Stratigraphy and Depositional Environment of the Mississagi Formation, Ontario, M.Sc., U. of Calgary	Sudbury File	
Popelar, J.	1972	Gravity Interpretation of the Sudbury Area	G.A.C. Special Paper 10	pp. 103-115
Robson, G. M.	1940	Sudbury Breccia, M. A., Queen's	O.D.M. MP 2	p. 39
Rowell, W. F.	1984	Platinum Group Elements and Gold in the Wanapitei Nipissing-Type Intrusion, Northern Ontario, M.Sc., UWO	Sudbury File	
Siemiatkowska, K. M.	1970	Bibliography of Huronian Geology Covering the Region from Sault Ste. Marie to the Grenville Front	Sudbury File	
Speers, E. C.	1956	The Age Relation, and Origin of the Sudbury Breccia (2 Vols.), Ph.D., Queen's	O.D.M. MP 2	p. 42
	1957	The Age Relations and Origin of Common Sudbury Breccia	Jr. Geol., Vol. 65 No. 5	pp. 497-514
Wintzer, S. R., et al	1976	Rb, Sr, and Strontium Isotopic Composition, K/Ar Age and Large Ion Lithophile Trace Element Abundances in Rocks and Glasses from the Wanapitei Lake Impact Structure	Geochim et Cosmochim Acta, Vol. 40	pp. 51-57

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Young, G. M.	1973	Origin of the Carbonate-Rich Early Proterozoic Espanola Formation, Ontario, Canada	G.S.A. Bull. Vol. 84	pp. 135-160
	1981	The Early Proterozoic Gowganda Formation, Ontario, Canada	Earth's Early Pre-Pleistocene Glacial Record. Cambridge U Press	pp. 807-812
Young, G. M., Nesbitt, H. W.	1985	The Gowganda Formation in the Southern Part of the Huronian Outcrop Belt, Ontario, Canada: Stratigraphy, Depositional and Regional Tectonic Significance	Precam. Res., Vol. 29	pp. 265-301
Zuyev, P. P.	1977	Some Aspects of the Study of the Chemical Composition of Eruptive Breccias	Doklady Akad Nauk SSSR, Vol. 240	pp. 169-172

RATHBUN TOWNSHIP

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages

GDIF FORM NO.9

NOTES AND ADDENDA

Aerial Photographs on File, Sudbury

Scale 1" = ¼ mile

Year	Roll	Line	Numbers
1946	37	142	17 - 31
	37	143	61 - 70
	204	143	5 - 9
	36	144	84 - 91
	204	145	51 - 62
	35	146	80 - 83
	33	146	2 - 7
1970	24	4633	236 - 245
	26	4632	20 - 26
	26	4631	85 - 90
	30	4630	20 - 24

In the various reports on the Crystal Mine five shafts are mentioned, in total. The writers are not always consistent in which number they apply to a shaft. The situation is further complicated by calling an adit a shaft.

The Comstock Mine is reported (AR Nos. 6 & 7) as being south of the Crystal, on WR 40, 170' from Bowland Lake, with a shaft and a test pit. No workings are shown on WR 40 on any O.G.S. map. Possibly they are underwater since the level of Lake Wanapitei was raised?

The Hubbel Mine (AR No. 7, p. 87) is reported as adjoining the Crystal Mine, on WH 50 which is probably a printing error for WD 50. There were two shafts, 15' and 25' deep in 1897. The comments made for the Comstock Mine apply also to the Hubbel.

MACKELCAN

Wanapitei

Lake

Wanapitei Indian Reserve No. 11

Bonhomme Cr.

Blackthorn L.

Rathbun L.

Lower Poulton L.

Portage Bay

16 21 9 19 17 4,6,11,17 6 11 4 3 10 24 11 12 28 1 2 20 4 25

MACKELCAN

Bonhomme Cr.

Blackthorn

Rathbun

Lake

Poulton L.

Cathro Lake

Portage Bay

Bowlan Lake

North Arm of Matagamasi Lake

McCarthy Bay

Boot Lake

Bassfin Lake

Bassfin Cr.

Portage L.

Burnt Island

Bonanza

KELLY

46°46'30"

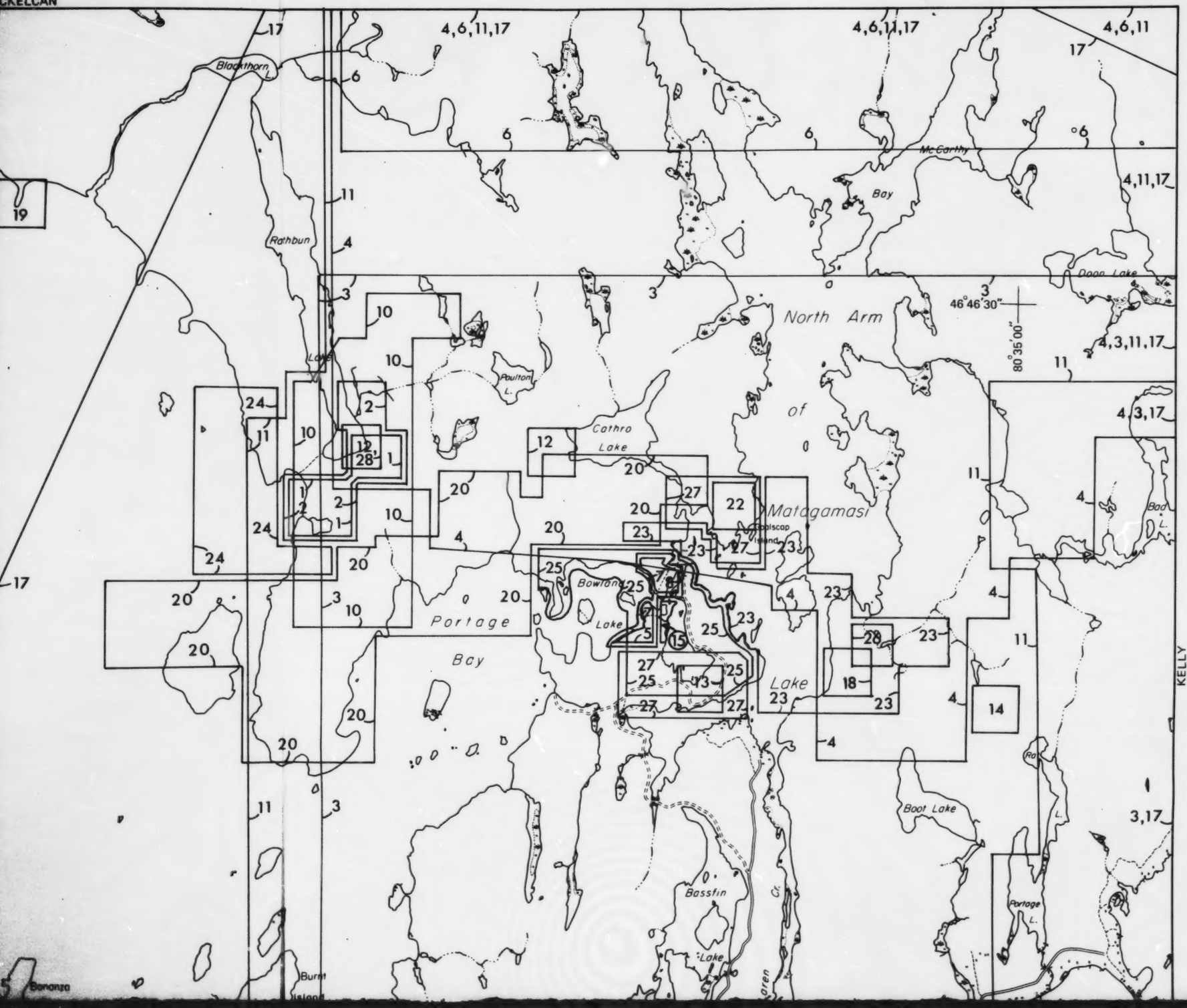
80°35'00"

Kilometre 0.5

Mile 0.5

EXP

CKELCAN



Ministry of Northern Development and Mines

Ontario

ONTARIO GEOLOGICAL SURVEY

PROPERTY LOCATION MAP

GEOLOGICAL DATA INVENTORY FOLIO 316

(Map 1 of 2)

RATHBUN TOWNSHIP

DISTRICT OF SUDBURY

Scale 1:31 680

EXPLORATION DATA FILE AREAS

Lake

46°43'00"

80°48'00"

17

20 1 2 2 20 24 1 10 4 20 24 20 3 10 20 Portage Bay 20 20 20

11 3

Bonanza I.

Burnt Island

11

11,17

3,11,17

Scadding Bay

17

17

17

Matagamasi

Coalscap Island

Bowland Lake

Portage Bay

Lake

Bonanza I.

Burnt Island

Bassin Lake

Mc Loren Cr.

Boot Lake

Portage L.

Kukagami Lake

Scadding Bay

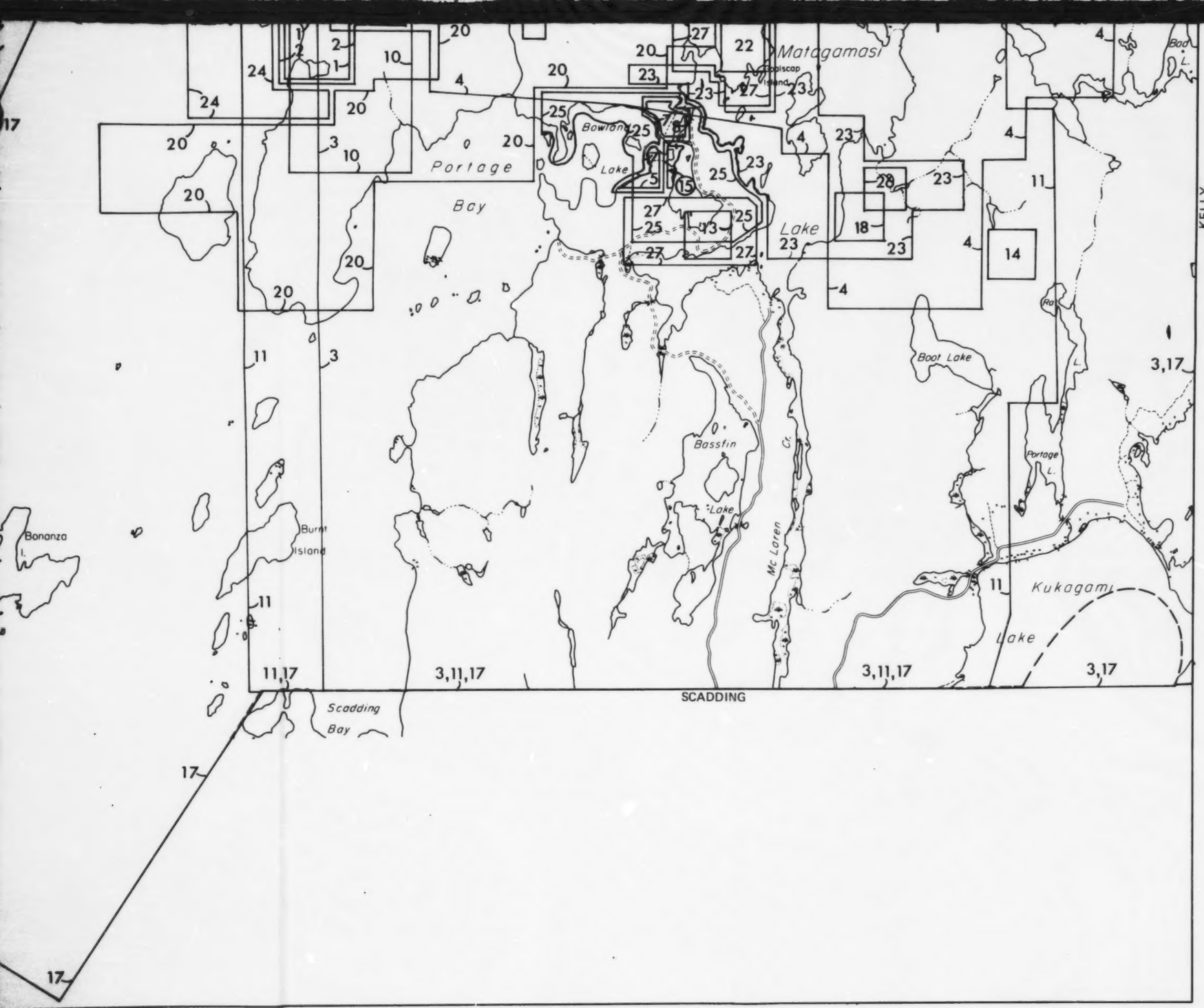
KELLY

SCADDING

EXPLORATION DATA FI

Reference number is always insid
See listing in text pages.

Small area exploration.



EXPLORATION DATA FILE AREAS

■ ① ⑥ Reference number is always inside work area outlined. See listing in text pages.

□ x ④ Small area exploration.

TYPES OF DATA SHOWN ON THIS MAP

GEOCHEMICAL AND GEOCHRONOLOGICAL DATA

- Geochemical sample site, with reference number
- Area of geochemical sampling, with reference number
- Age dating material sampling site, with reference number
- Geochemical Anomaly

GEOPHYSICAL ANOMALIES

- Airborne magnetic anomaly
- Airborne electromagnetic anomaly
  Length of anomaly along flight line
- Airborne electromagnetic anomaly
  Location of anomaly along flight line
- Airborne electromagnetic anomaly
  Conductor axis: definite, probable, possible
- Airborne radiometric anomaly
- Ground magnetic anomaly
- Ground electromagnetic anomaly
  (VL - Vertical loop; HL - Horizontal Loop;
  VLF - Very low freq; Turam; JEM -
  Crone Em - 16)
- Ground radiometric anomaly
- Induced polarization anomaly
- Self potential anomaly
- Audio-frequency magnetic anomaly
  (total intensity)
- Resistivity anomaly
- Gravity anomaly

MISCELLANEOUS DATA

- Trenching, pit
- Rock quarry
- Adit
- Sand and/or gravel pit

MACKELCAN

Bannonme Cr.

Au J

AEM VLF

AM

Cu, Ni, Pd, Au, Ag, Pt

AEM

Wanapitei

Lake

Portage Bay

COMSTOCK MINE Location Unknown

No. 1 Shaft

No. 4 Shaft

CRYSTAL MINE

HUBBEL MINE Location Unknown

GORDON (?) MINE

LAST CHANCE MINE

Au K

Au I

Au F

VLF

IP

Boot Lake

Portage L.

Bassin Cr.

46°46'30"

80°35'00"

Ministry of Northern Development and Mines

Ontario

ONTARIO GEOLOGICAL SURVEY

EXPLORATION DATA MAP

GEOLOGICAL DATA INVENTORY FOLIO 316

(Map 2 of 2)

RATHBUN TOWNSHIP

DISTRICT OF SUDBURY

Scale 1:31 680

Kilometre 0.5 0 0.5 1 Kilometre

Mile 0.5 0 0.5 1 Mile

GEOLOGICAL AND MINING SYMBOLS

TYPES OF DATA SHOWN ON THIS MAP

MINERAL OCCURRENCES

- cp A. — Mineral occurrence at surface, with reference letter
- Au A. 84' — Mineral occurrence with shaft, depth given with reference letter
- Ag A. — Mineral occurrence reported but exact location uncertain, with reference letter
- cp A. — Mineralized float with reference letter

DRILLHOLE

- Location of single drillhole, with reference number

☐ —ARA— Airborne radiometric anomaly

■ —M— Ground magnetic anomaly

■ —VL— Ground electromagnetic anomaly
(VL - Vertical loop; HL - Horizontal Loop;
VLF - Very low freq; Turam; JEM -
Crone Em - 16)

☐ —RA— Ground radiometric anomaly

■ —IP— Induced polarization anomaly

☐ —SP— Self potential anomaly

☐ —AFMAG— Audio-frequency magnetic anomaly
(total intensity)

☐ —R— Resistivity anomaly

☐ —GR— Gravity anomaly

MISCELLANEOUS DATA

■ Trenching, pit

■ Adit

☐ Open pit

■ 6 Multiple Pits

☐ Rock quarry

☐ Sand and/or gravel pit

→ NOTE: Consult the text that accompanies this map for pertinent lists of data, references, and abbreviations.

ØAEM

80°48'00"

46°43'00"

ØAEM

Lake

AEM

AEM

AEM

AEM

AM

AM

AM

AEM VLF

VLF

Bonanza

Burnt Island

Scadding Bay

COMSTOCK MINE Location Unknown

No 1 Shaft

No 4 Shaft

CRYSTAL MINE

HUBBEL MINE Location Unknown

GORDON ?! MINE

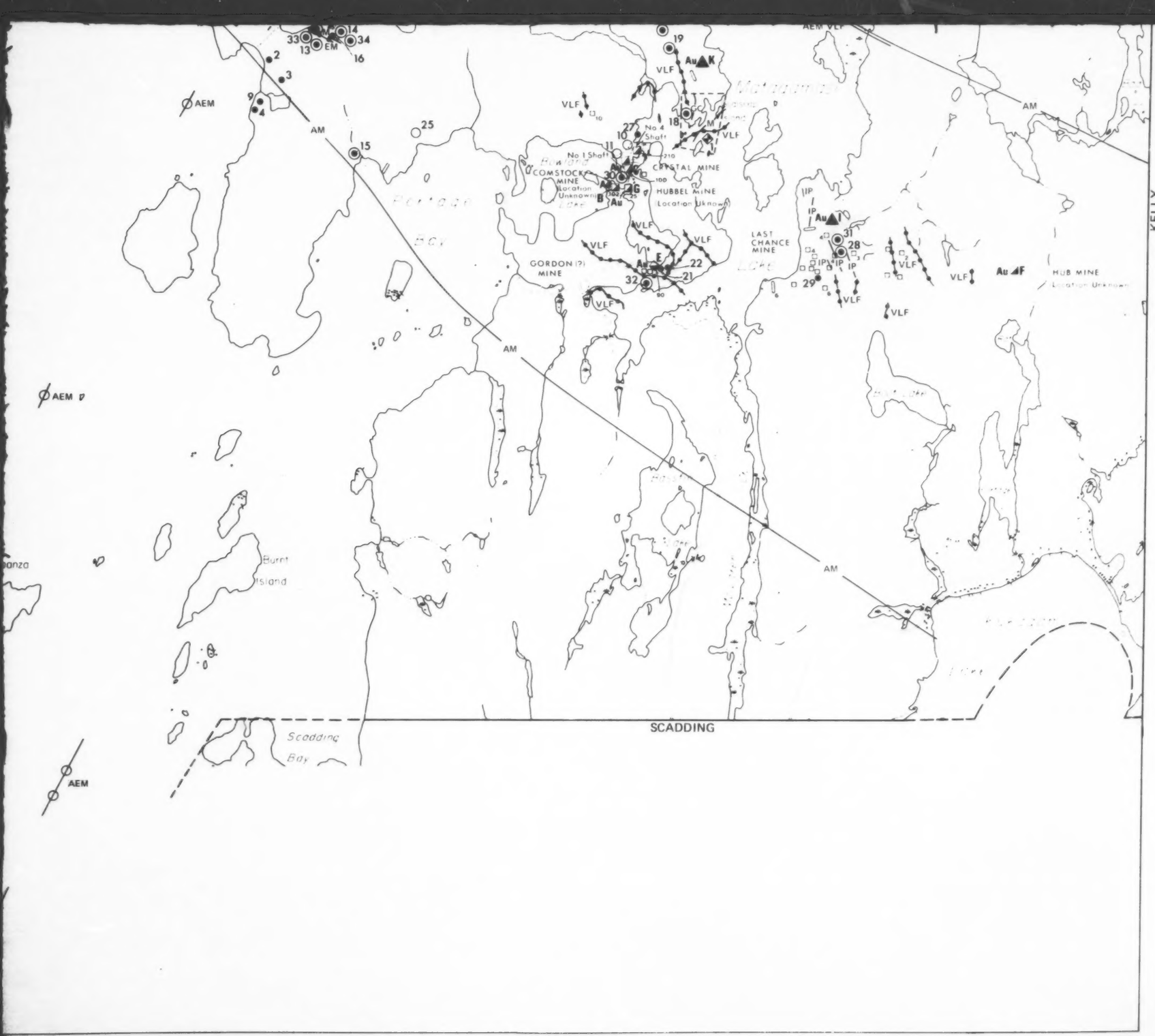
LAST CHANCE MINE

HUB MINE Location unknown

Au

IP

SCADDING



GEOLOGICAL AND MINING SYMBOLS

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- cp A. — Mineralized float with reference letter

DRILLHOLE

- ●² — Location of single drillhole, with reference number
- ◉² — Location of closely spaced group of drillholes, with reference number
- (?)² — Drillhole, exact location uncertain, with reference number
- Property with underground drillholes in this general area, with reference number
- ○² — Property with drillholes which have not been plotted on map, with reference number
- ⊕² — Reverse circulation drillhole; churn drilling, with reference number